Interview for GIS Technician I – Temporary

PROJECTS:

You are asked to perform a simple Microsoft Office task and some small GIS projects that will require loading, querying, and editing GIS data. This is not a closed-book test and this is not school where cheating means you're bad. This is the real world, pretend you're working here. Bring this document to your interview. If you are reading this for the first time whilst sitting in this office, you should probably reschedule your interview for another day.

Do as much as you can on each project then save them (as well as your new data) under the following folder: C:\GIS\Projects\<YourLastName>. Note the following:

> GIS data is stored under P:\GIS\Data\<DataTheme>. There are folders for various data groups such as cadastral, structures, transportation, etc. It should be self-evident.
>
> Aerial photography is stored under P:\Images\<Year> (also self-evident) and:
> 1. The 1995 photos each cover an entire PLSS township. Their file name is the same as their equivalent CAMA township number.
> 2. The 2004 photos each cover one section in a township. Their file name is the same as their equivalent CAMA township number plus section number.
> 3. The 2005 TIFF photos each cover a quarter of a topographic map quadrangle. Their file name is the same as their equivalent quarter-quad name. (Under the \Data\Reference folder is a Coverage called "Graticule." In that Coverage is a feature class called "region.doqq" which has the names of the quarter-quads.)
>
> Environmental health data is stored under P:\ENV\GIS\Data. Under the "Septics" folder, you will find shapefiles for septic permits. Please do not open this file for editing!

IMPORTANT: If you choose to do Item 5 below, do it immediately. You will need extra time to wait for the correction files. Also, we will provide extra assistance on this one.

ALSO: when requested to print documents, print 2 copies.

Do the following:

Under C:\GIS\Data is the text file "*bands.txt*." Import this file into Microsoft Excel. It contains the names of the greatest rock bands/performers of all time. Insert more records into the table and export it as a dBase IV (.dbf). Create a Microsoft Word document to explain the steps involved in the task and why your records are correct and our records are wrong. Insert your exported table and print the document.

Do three of the following:

1. The structure.shp file has a column for the name of the occupant. Find all of the fire stations in the county and send them to a new shapefile. Print a countywide map showing the stations, the county boundary, and whatever else you feel is necessary to convey their locations. Include somewhere on the map a blurb describing the process.

2. Some guy just got transferred to Hamilton from Alabama. He needs to live in town but doesn't want his kids attending some big city school. He has asked for a map to get from here to the nearest school that is NOT in Hamilton. Print the map, forget the blurb.

3. How many septic permits has a certain sanitarian (we'll give you the name) issued in Township 1468 since January 1, 2008? Send those to a new shapefile. Print the map, include the blurb.

4. Some lady needs an address that requires naming a road that has existed for quite some time, which means that it is visible in our aerial photography. It takes off from Westside Rd very, very near the NE corner of Township 1366, Section 11. It heads westerly for a bit, veers a little south, shoots northwest to cross the creek, turns west again (near the NE corner of Section 10), then winds its way south westerly through the trees. She wants it to end at the west line of Section 10. Digitize the road into roads.shp and fill in its attributes. The name will be Orion Belt Way, its type is PRIV, its class is NONE, and its surface is D1M. The source is the year of whichever aerial photo you use to digitize. Print a map, include the blurb.

5. On the NE corner of this block is a certain survey marker. Find it and GPS it. Download and correct the data. Print a map showing the point over an aerial photo and label the streets. Forget the blurb.

<u>QUESTIONS:</u>

1. Tell us about your interests, hobbies, goals.
2. What is GIS?
3. What things would you like to learn here?
4. Describe your experience with GIS data editing.
5. Describe your knowledge of 911 & E-911 data.
6. Describe your knowledge of the PLSS/Cadastre/Land Records.
7. What job duties have you had that would be of value here?
8. Describe any software experience you have that would relate to this position.
9. Describe your experience dealing with the public.
10. How is your driving?